UN-23-2005

Application No. 10/635,401 Amendment dated June 23, 2005 Reply to Office Action of February 23, 2005

03:35

## AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions and listings of claims in the application:

## Listing of Claims:

- 1. (Original) A propylene-containing composition, comprising:
  - (a) at least 95 volume percent propylene;
  - (b) at least 0.5 volume percent propane;
  - (c) at least 10 vppm ethane;
  - (d) at least 1 vppm ethylene; and
  - (e) from 0.5 to 2 vppm dimethyl ether.
- 2. (Original) The composition of claim 1, wherein the composition further comprises:
  - (f) at least 0.05 vppm acetylene.
- (Original) The composition of claim 2, wherein the composition further comprises:
  - (g) from 1 to 2 vppm acetylene.
- 4. (Original) The composition of claim 3, wherein the composition further comprises:
  - (h) from 1 to 3 vppm methyl acetylene.
- 5. (Original) The composition of claim 4, wherein the composition further comprises:
  - (i) from 1 to 3 vppm propadiene.
- 6. (Original) The composition of claim 5, wherein the composition further comprises:
  - (j) from 5 to 15 vppm C4+ hydrocarbons.

- (Original) The composition of claim 6, wherein the composition further comprises:
  - (k) from 0.5 to 1 vppm methanol.
- (Original) The composition of claim 7, wherein the composition further comprises:
  - **(1)** from 1 to 5 vppm water.
- 9. (Original) The composition of claim 8, wherein the composition further comprises:
  - (m) from 5 to 20 vppm hydrogen.
- 10. (Original) The composition of claim 1, wherein the composition further comprises:
  - **(f)** at least 0.01 vppm methyl acetylene.
- (Original) The composition of claim 1, wherein the composition further comprises: 11.
  - **(f)** at least 0.01 vppm propadiene.
- 12. (Original) The composition of claim 1, wherein the composition further comprises:
  - **(f)** at least 0.02 vppm C4+ hydrocarbons.
- 13. (Original) The composition of claim 1, wherein the composition further comprises:
  - (f) at least 0.01 vppm methanol.
- 14. (Original) The composition of claim 1, wherein the composition further comprises:
  - (f) at least 0.01 vppm water.
- 15. (Original) The composition of claim 1, wherein the composition further comprises:
  - **(f)** at least 0.01 vppm hydrogen.

P.07

Application No. 10/635,401

Amendment dated June 23, 2005

Reply to Office Action of February 23, 2005

- 16. (Original) The composition of claim 1, wherein the composition comprises from 2 to about 5 volume percent propane.
- 17. (Original) The composition of claim 1, wherein the composition comprises from 300 to 1000 vppm ethane.
- 18. (Original) The composition of claim 1, wherein the composition comprises from 5 to 15 vppm ethylene.
- 19. (Original) The composition of claim I, wherein the composition comprises from 1 to 3 vppm methyl acetylene.
- 20. (Original) The composition of claim 1, wherein the composition comprises from 1 to 3 vppm propadiene.
- 21. (Original) The composition of claim 1, wherein the composition comprises from 5 to 15 vppm C4+ hydrocarbons.
- 22. (Original) The composition of claim 1, wherein the composition comprises from 0.5 to 2 vppm methanol.
- 23. (Original) The composition of claim 1, wherein the composition comprises from 1 to 5 vppm water.
- 24. (Original) The composition of claim 1, wherein the composition comprises from 5 to 20 vppm hydrogen.

- 25. (Original) The composition of claim 1, wherein the composition comprises from 0.5 to 1 vppm dimethyl ether.
- 26. (Original) The composition of claim 1, wherein the composition comprises from 1 to 2 vppm dimethyl ether.
- 27. (Original) The composition of claim 1, wherein the composition comprises less than 0.01 vppm arsine.
- 28. (Original) The composition of claim 1, wherein the composition comprises less than 0.01 vppm phosphine.
- 29. (Original) The composition of claim 1, wherein the composition is suitable for polymerization.
- 30. (Original) A propylene-containing composition, comprising:
  - (a) at least 95 volume percent propylene;
  - (b) from 0.5 to about 5 volume percent propane;
  - (c) at least 0.02 vppm C4+ hydrocarbons;
  - (d) at least 0.01 vppm methanol; and
  - (e) from 0.5 vppm to 2 vppm dimethyl ether.
- 31. (Original) The composition of claim 30, wherein the composition comprises from 2.0 to about 5.0 volume percent propane.
- 32. (Original) The composition of claim 30, wherein the composition comprises from 5 to 15 vppm C4+ hydrocarbons.

- (Original) The composition of claim 30, wherein the composition comprises from 0.5 to 1 33. vppm dimethyl ether.
- 34. (Original) The composition of claim 30, wherein the composition comprises from 1 to 2 vppm dimethyl ether.
- 35. (Original) The composition of claim 30, wherein the composition comprises less than 0.01 vppm arsine.
- 36. (Original) The composition of claim 30, wherein the composition comprises less than 0.01 vppm phosphine.
- 37. (Original) The composition of claim 30, wherein the composition is suitable for polymerization.
- 38. (Original) A propylene-containing composition, comprising:
  - (a) at least 95 volume percent propylene;
  - **(b)** from 0.5 to about 5 volume percent propane;
  - at least 10 vppm ethane; (c)
  - (d) at least 0.05 vppm acetylene; and
  - (e) from 0.5 to 2 vppm dimethyl ether.
- 39. (Original) The composition of claim 38, wherein the composition comprises from 2.0 to about 5 volume percent propane.
- 40. (Original) The composition of claim 38, wherein the composition comprises from 300 to 1000 vppm ethane.

- 41. (Original) The composition of claim 38, wherein the composition comprises from 1 to 2 vppm acetylene.
- 42. (Original) The composition of claim 38, wherein the composition comprises from 0.5 to 1 vppm dimethyl ether.
- 43. (Original) The composition of claim 38, wherein the composition comprises from 1 to 2 vppm dimethyl ether.
- 44. (Original) The composition of claim 38, wherein the composition comprises less than 0.01 vppm arsine.
- 45. (Original) The composition of claim 38, wherein the composition comprises less than 0.01 vppm phosphine.
- 46. (Original) The composition of claim 38, wherein the composition is suitable for polymerization.
- 47. (Original) A propylene-containing composition, comprising:
  - (a) at least 95 volume percent propylene;
  - (b) from 0.5 to about 5 volume percent propane;
  - (c) at least 10 vppm ethane;
  - (d) at least 0.02 vppm C4+ hydrocarbons; and
  - (e) from 0.5 to 2 vppm dimethyl ether.
- 48. (Original) The composition of claim 47, wherein the composition comprises from 2.0 to about 5 volume percent propane.

P.11

Application No. 10/635,401 Amendment dated June 23, 2005 Reply to Office Action of February 23, 2005

- (Original) The composition of claim 47, wherein the composition comprises from 300 to 1000 vppm ethane.
- (Original) The composition of claim 47, wherein the composition comprises from 5 to 15 vppm C4+ hydrocarbons.
- 51. (Original) The composition of claim 47, wherein the composition comprises from 0.5 to 1 vppm dimethyl ether.
- 52. (Original) The composition of claim 47, wherein the composition comprises from 1 to 2 vppm dimethyl ether.
- (Original) The composition of claim 47, wherein the composition comprises less than 53. 0.01 vppm arsine.
- 54. (Original) The composition of claim 47, wherein the composition comprises less than 0.01 vppm phosphine.
- 55. (Original) The composition of claim 47, wherein the composition is suitable for polymerization.
- 56. (Original) A propylene-containing composition, comprising:
  - (a) at least 95 volume percent propylene;
  - (b) from 0.5 to about 5 volume percent propane;
  - (c) at least 0.01 vppm water;
  - (d) at least 0.01 vppm methanol; and
  - (e) from 0.5 to 2 vppm dimethyl ether.

P.12

Application No. 10/635,401 Amendment dated June 23, 2005 Reply to Office Action of February 23, 2005

- (Original) The composition of claim 56, wherein the composition comprises from 2.0 to about 5 volume percent propane.
- (Original) The composition of claim 56, wherein the composition comprises from 1 to 5 vppm water.
- 59. (Original) The composition of claim 56, wherein the composition comprises from 0.5 to 1 wppm methanol.
- 60. (Original) The composition of claim 56, wherein the composition comprises from 0.5 to 1 vppm dimethyl ether.
- 61. (Original) The composition of claim 56, wherein the composition comprises from 1 to 2 vppm dimethyl ether.
- 62. (Original) The composition of claim 56, wherein the composition comprises less than 0.01 vppm arsine.
- 63. (Original) The composition of claim 56, wherein the composition comprises less than 0.01 vppm phosphine.
- 64. (Original) The composition of claim 56, wherein the composition is suitable for polymerization.

65 - 131 (Canceled)